SONY

3-864-029-61(1)

FM Stereo FM-AM Receiver

Operating Instructions EN

R·D·S EON

STR-DB825
STR-DB725

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WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

Do not install the appliance in a confined space, such as a bookcase or built-in cabinet.

Precautions

On safety

Should any solid object or liquid fall into the cabinet, unplug the receiver and have it checked by qualified personnel before operating it any further.

On power sources

- Before operating the receiver, check that the operating voltage is identical with your local power supply. The operating voltage is indicated on the nameplate at the rear of the receiver.
- The unit is not disconnected from the AC power source (mains) as long as it is connected to the wall outlet, even if the unit itself has been turned off.
- If you are not going to use the receiver for a long time, be sure to disconnect the receiver from the wall outlet. To disconnect the AC power cord, grasp the plug itself; never pull the cord.
- AC power cord must be changed only at the qualified service shop.

On placement

- Place the receiver in a location with adequate ventilation to prevent heat buildup and prolong the life of the receiver.
- Do not place the receiver near heat sources, or in a place subject to direct sunlight, excessive dust or mechanical shock.
- Do not place anything on top of the cabinet that might block the ventilation holes and cause malfunctions.

On operation

Before connecting other components, be sure to turn off and unplug the receiver.

On cleaning

Clean the cabinet, panel and controls with a soft cloth slightly moistened with a mild detergent solution. Do not use any type of abrasive pad, scouring powder or solvent such as alcohol or benzine.

If you have any question or problem concerning your receiver, please consult your nearest Sony dealer.

About This Manual

The instructions in this manual are for models STR-DB825 and DB725. Check your model number by looking at the lower right corner of the front panel.

Differences between the models

The STR-DB825 and DB725 are identical in shape. However, they differ in the following ways:

- Supplied remote model (page 4)
- Specifications (pages 36 and 37)

Conventions

- The instructions in this manual describe the controls on the receiver. You can also use the controls on the supplied remote if they have the same or similar names as those on the receiver. For details on the use of your remote, refer to the separate operating instructions supplied with the remote.
- The following icon is used in this manual:

Indicates hints and tips for making the task easier.

This receiver incorporates the Dolby* Pro Logic Surround system.

* *Manufactured under license from Dolby Laboratories Licensing Corporation. DOLBY, the double-D symbol ◻◻, "PRO LOGIC," and Dolby Digital (AC-3) are trademarks of Dolby Laboratories Licensing Corporation.*

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EN

Hooking Up the Components

This chapter describes how to connect various audio and video components to the receiver. Be sure to read the sections for the components that you have before you actually connect them to the receiver.

Unpacking

Check that you received the following items with the receiver:

- FM wire antenna (1)
- AM loop antenna (1)
- Remote commander (remote) (1)

Model	Remote
STR-DB825	RM-LJ301
STR-DB725	RM-PP401

- LR6 (size AA) alkaline batteries (3) (STR-DB825)
  R6 (size AA) batteries (2) (STR-DB725)
- Operating Instructions of the remote

Inserting batteries into the remote

Insert the LR6 (STR-DB825) or R6 (STR-DB725) (size AA) batteries with the + and – properly oriented in the battery compartment. When using the remote, point it at the remote sensor ▣ on the receiver.
For details, refer to the operating instructions supplied with your remote.

When to replace batteries

Under normal conditions, the batteries should last for about 3 months. When the remote no longer operates the receiver, replace all the batteries with new ones.

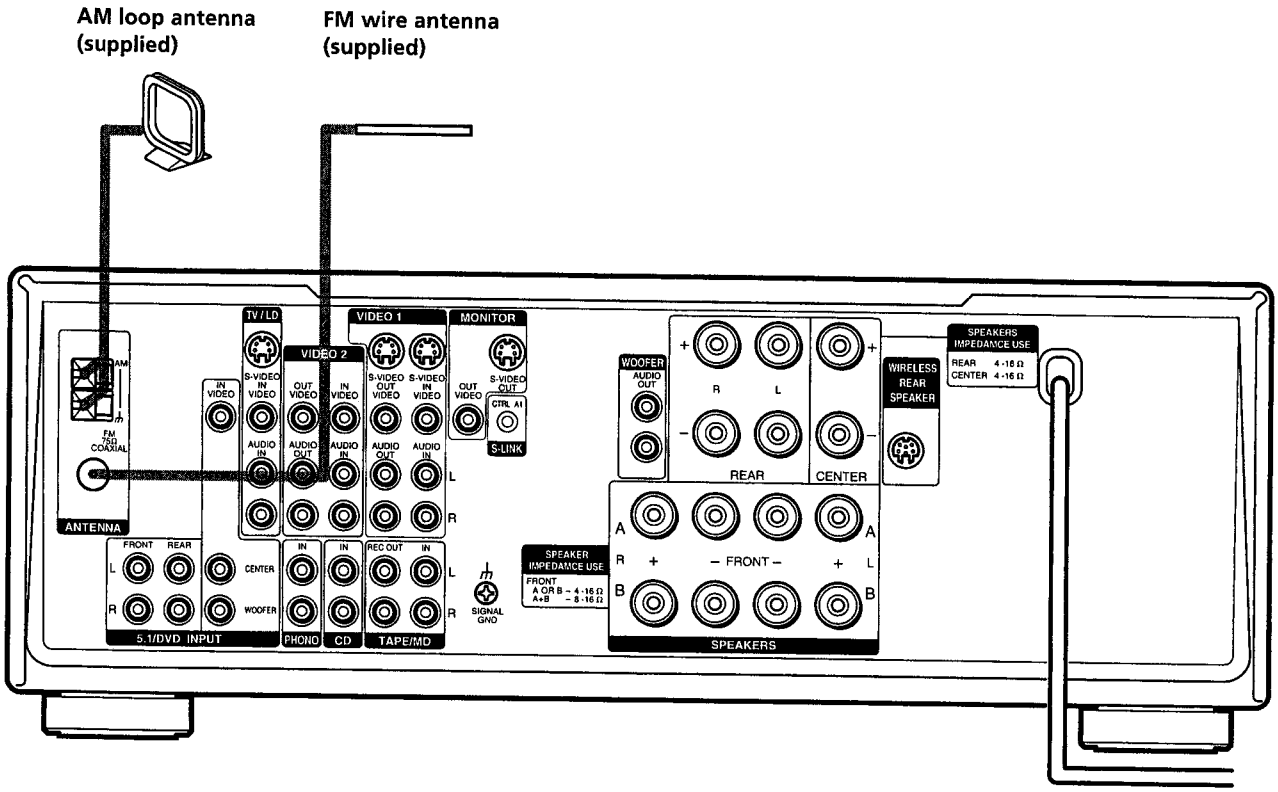
Notes

- Do not leave the remote in an extremely hot or humid place.
- Do not use a new battery with (an) old one(s).
- Do not expose the remote sensor to direct sunlight or lighting apparatuses. Doing so may cause a malfunction.
- If you don't use the remote for an extended period of time, remove the batteries to avoid possible damage from battery leakage and corrosion.

Before you get started

- Turn off the power to all components before making any connections.
- Do not connect the AC power cords until all of the connections are completed.
- Be sure to make connections firmly to avoid hum and noise.
- When connecting an audio/video cord, be sure to match the color-coded pins to the appropriate jacks on the components: yellow (video) to yellow; white (left, audio) to white; and red (right, audio) to red.

Antenna Hookups



Terminals for connecting the antennas

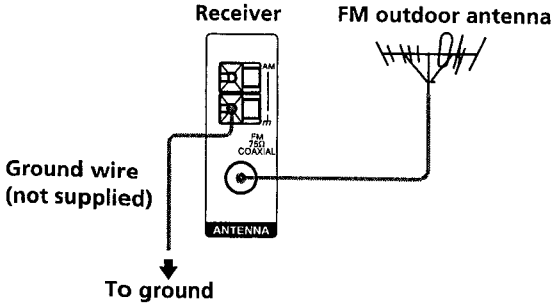
Connect the	To the
AM loop antenna	AM terminals
FM wire antenna	FM 75Ω COAXIAL terminal

Notes on antenna hookups

- To prevent noise pickup, keep the AM loop antenna away from the receiver and TV.
- After connecting the FM wire antenna, keep it as horizontal as possible.

If you have poor FM reception

Use a 75-ohm coaxial cable (not supplied) to connect the receiver to an outdoor FM antenna as shown below.



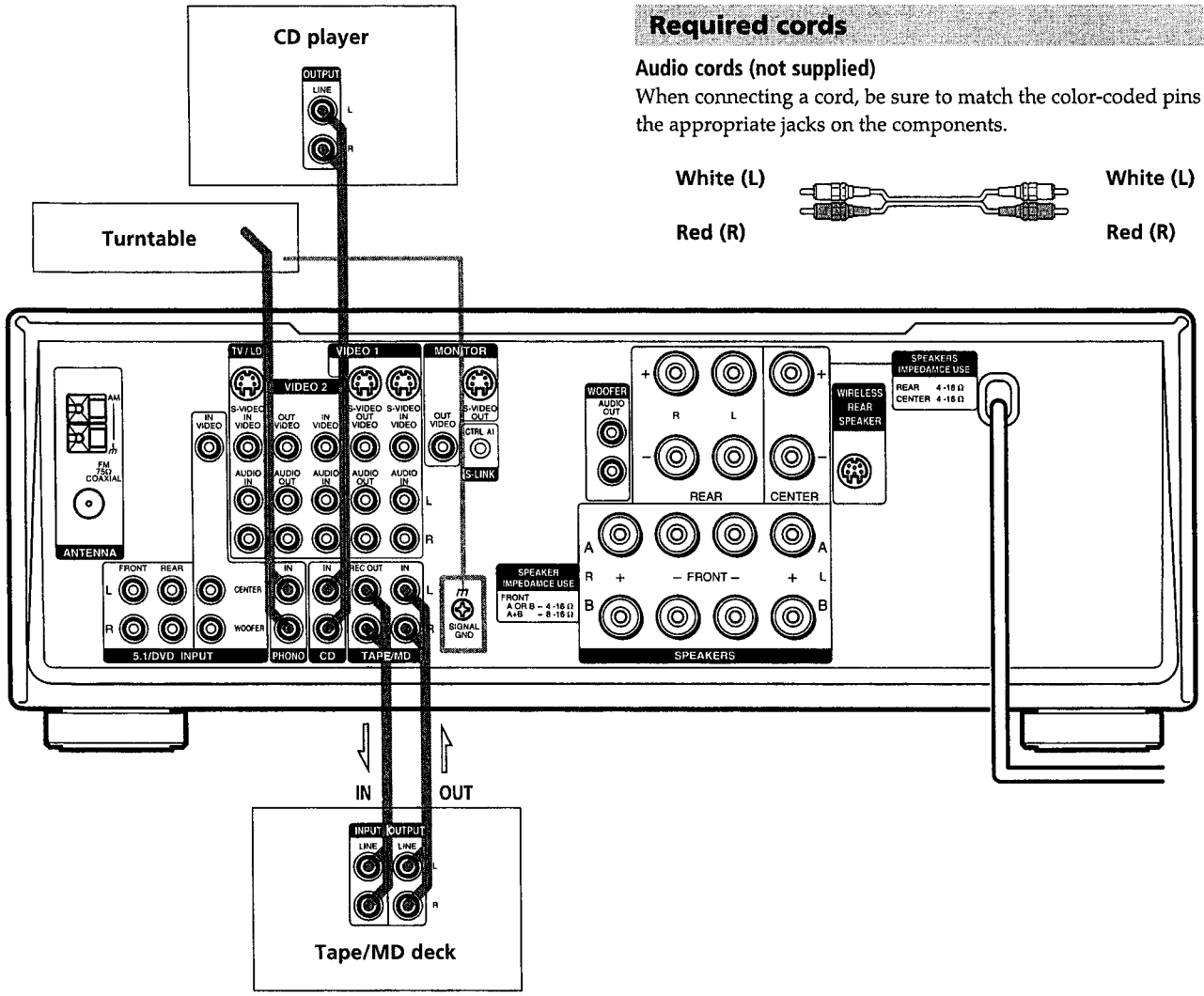
Important

If you connect the receiver to an outdoor antenna, ground it against lightning as shown in the illustration in the left column. To prevent a gas explosion, do not connect the ground wire to a gas pipe.

Note

Do not use the ⏚ SIGNAL GND terminal for grounding the receiver.

Audio Component Hookups



Required cords

Audio cords (not supplied)

When connecting a cord, be sure to match the color-coded pins to the appropriate jacks on the components.

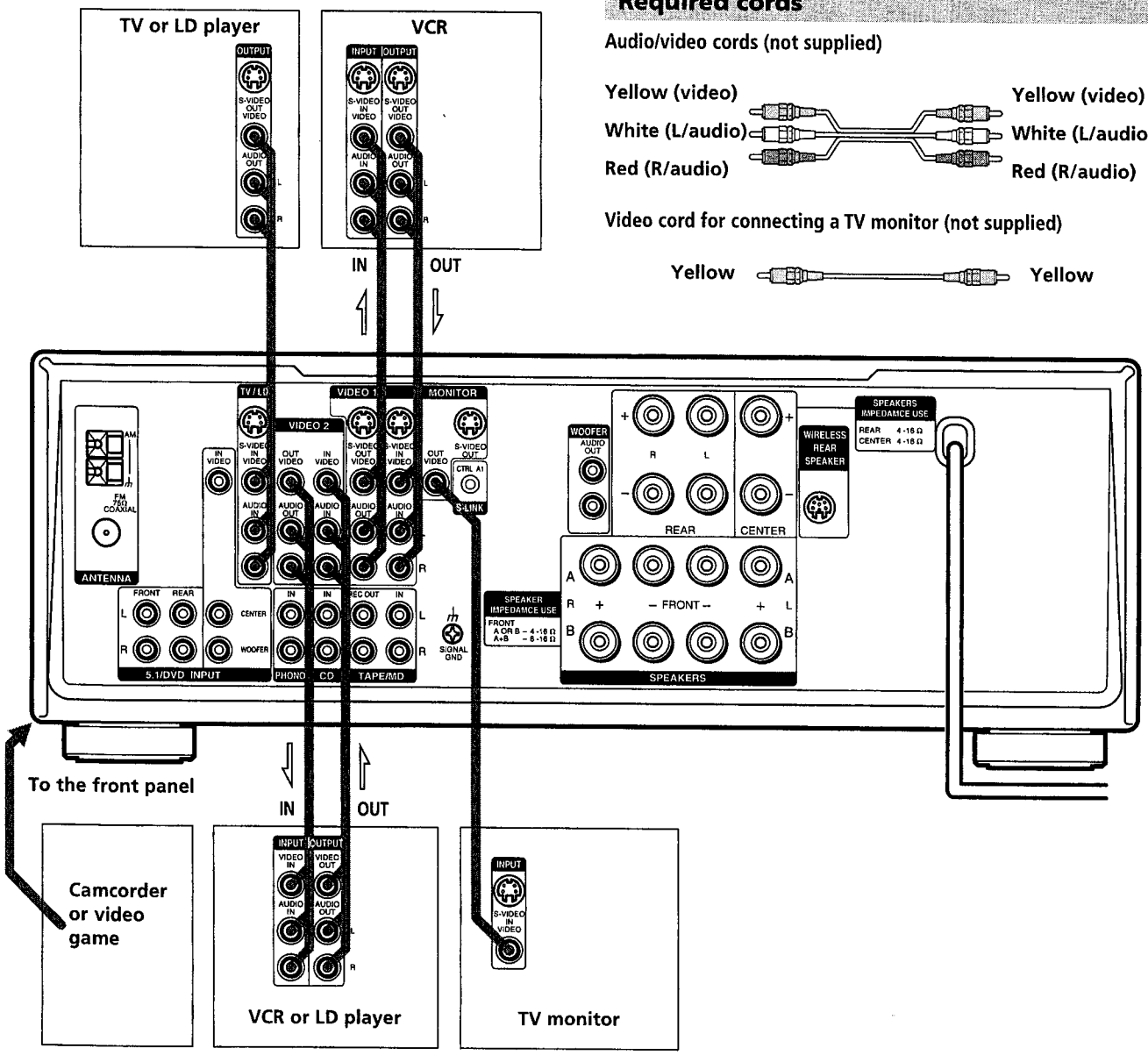
Jacks for connecting audio components

Connect a	To the
Turntable	PHONO jacks
CD player	CD jacks
Tape deck or MD deck	TAPE/MD jacks

Note on audio component hookups

If your turntable has a ground wire, connect it to the ⏚ SIGNAL GND terminal on the receiver.

Video Component Hookups



Required cords

Audio/video cords (not supplied)

Video cord for connecting a TV monitor (not supplied)

Jacks for connecting video components

Connect a	To the
TV or LD player	TV/LD jacks
VCR	VIDEO 1 jacks
Additional VCR or LD player	VIDEO 2 jacks
TV monitor	MONITOR jack
Camcorder or video game	VIDEO 3 INPUT jacks on the front panel

Note on video component hookups

You can connect your TV's audio output jacks to the TV/LD AUDIO IN jacks on the receiver to apply Dolby Pro Logic Surround effects on the audio from the TV. In this case, do not connect the video output jack on the TV to the TV/LD VIDEO IN jack on the receiver. If you connect a TV tuner, connect the audio and video output jacks to the receiver as shown above.

To enjoy higher quality video images

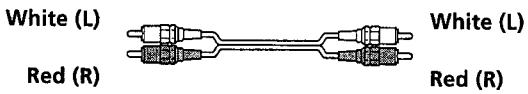
Use an S-VIDEO cord (not supplied) to connect the external devices to the TV/LD, VIDEO 1, VIDEO 3, or MONITOR S-VIDEO (IN/OUT) jack on the receiver.

5.1 Input Hookups

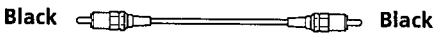
This receiver is equipped with 5.1/DVD INPUT jacks. By connecting your DVD player or other digital video source through a multi-channel decoder (e.g., Dolby Digital (AC-3) decoder) to these jacks, you can enjoy theater-quality Multi-Channel Surround sound in your own home. To enjoy Multi-Channel Surround sound to its full extent, you will need five speakers (two front speakers, two rear speakers, and a center speaker) and a subwoofer. Refer to the instruction manual supplied with your Dolby Digital (AC-3) decoder etc., for details on the 5.1-channel input hookups.

Required cords

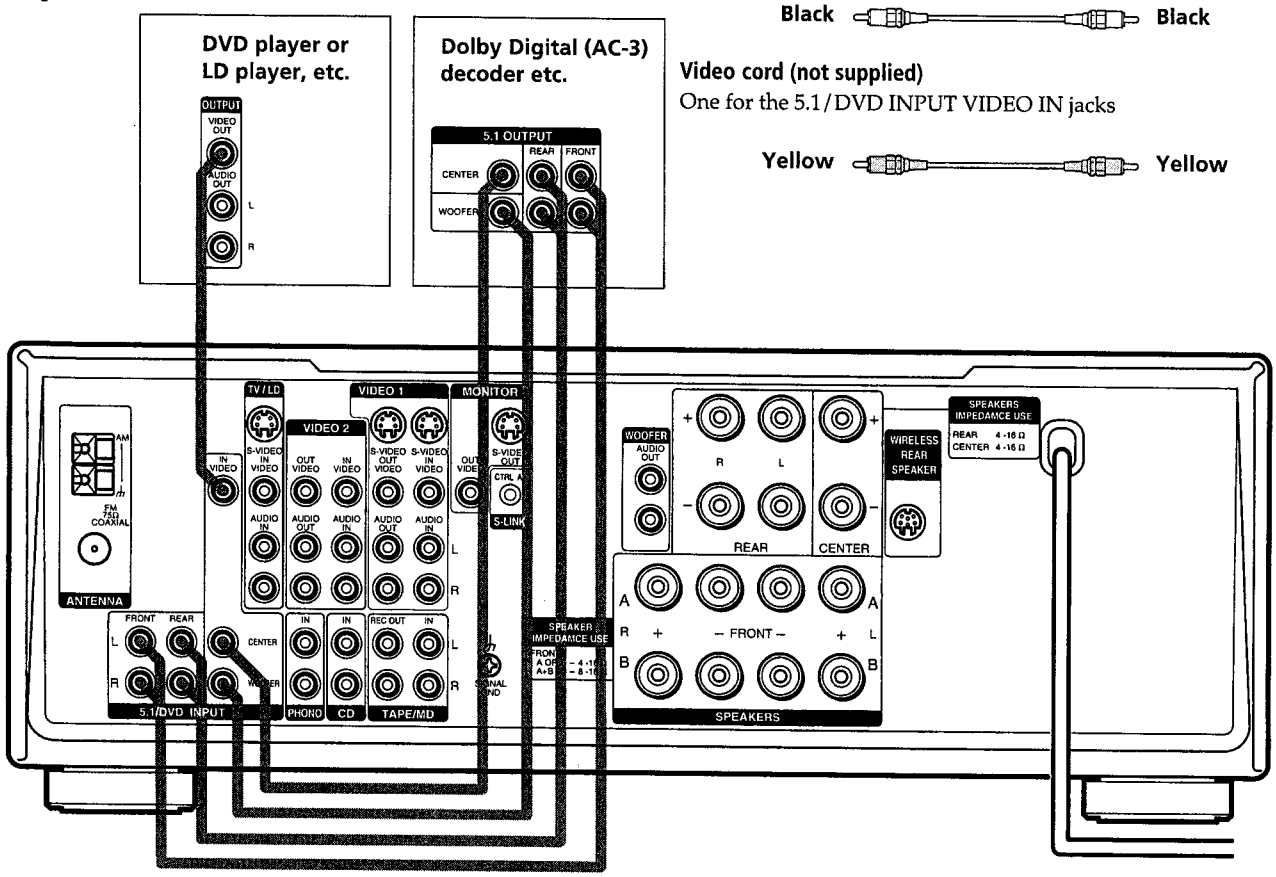
Audio cords (not supplied)
Two for the 5.1/DVD INPUT FRONT and REAR jacks



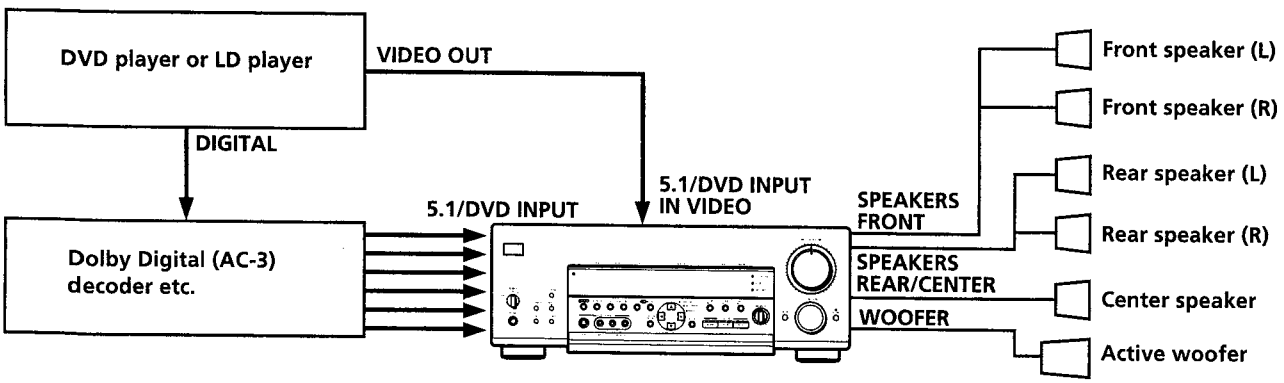
Monaural audio cords (not supplied)
Two for the 5.1/DVD INPUT CENTER and WOOFER jacks



Video cord (not supplied)
One for the 5.1/DVD INPUT VIDEO IN jacks

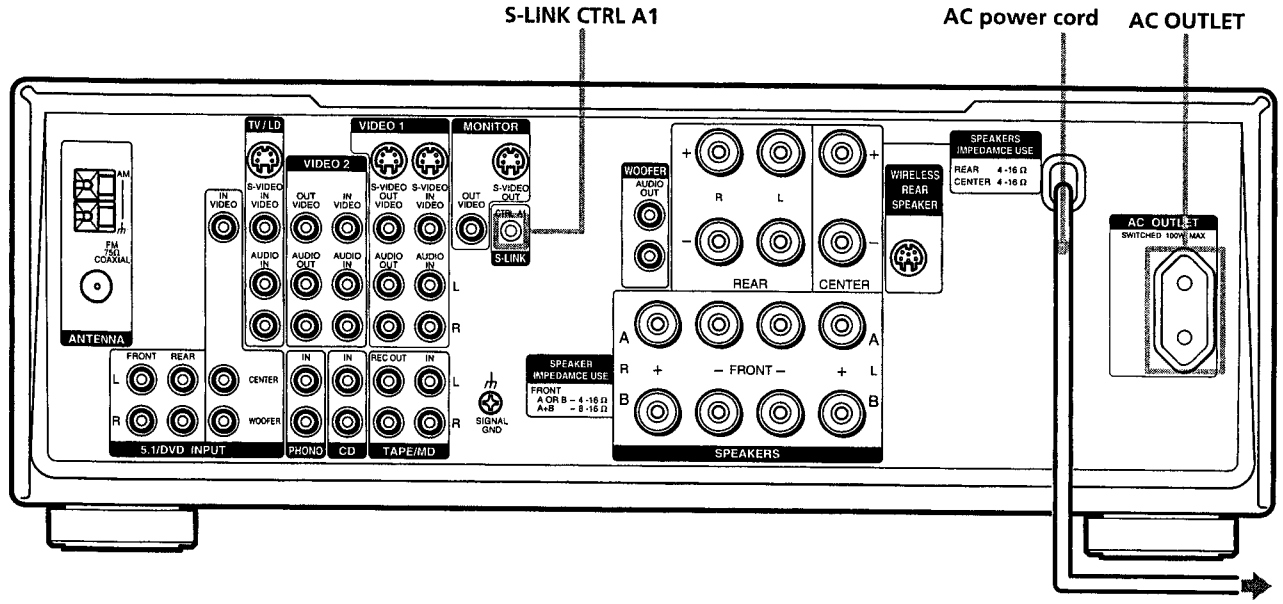


Example of Dolby Digital system hookup using the 5.1/DVD INPUT jacks



- DVD players with a built-in multi-channel decoder can be connected directly to the 5.1/DVD INPUT jacks on the receiver.
- See page 11 for details on speaker system hookup.

Other Hookups



S-LINK CONTROL A1 hookup

- **If you have an S-LINK CONTROL A1-compatible Sony CD player, tape deck, or MD deck**
  Use a CONTROL A1 cord (not supplied) to connect the S-LINK CTRL A1 jack on the CD player, tape deck, or MD deck to the S-LINK CTRL A1 jack on the receiver. Refer to the separate manual "CONTROL-A1 Control System" and the operating instructions supplied with your CD player, tape deck, or MD deck for details.

- **If you have a Sony CD changer with a COMMAND MODE selector**
  If your CD changer's COMMAND MODE selector can be set to CD 1, CD 2, or CD 3, be sure to set the command mode to "CD 1" and connect the changer to the CD jacks on the receiver.
  If, however, you have a Sony CD changer with VIDEO OUT jacks, set the command mode to "CD 2" and connect the changer to the VIDEO 2 jacks on the receiver.

Connecting the AC power cord

Before connecting the AC power cord of this receiver to a wall outlet:

- Connect the speaker system to the receiver (see page 11).
- Turn the MASTER VOLUME control to the leftmost position (0).

Connect the AC power cord(s) of your audio/video component(s) to a wall outlet.

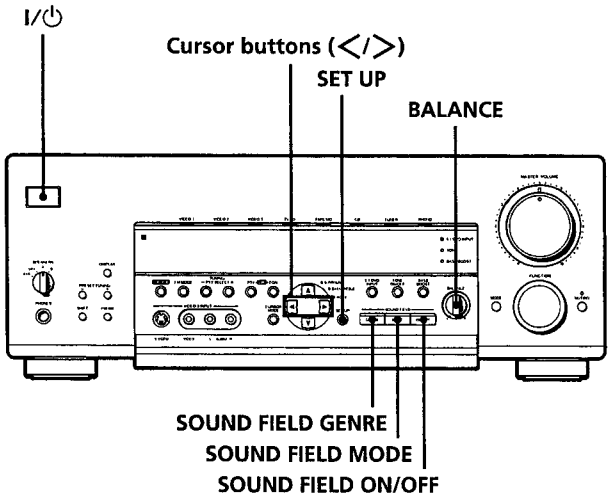
If you connect other audio/video component to AC OUTLET on the receiver, the receiver will supply power to the connected component, allowing you to turn on or off the whole system when you turn on/off the receiver.

Caution

Make sure that the power consumption of the component connected to the receiver's AC OUTLET does not exceed the wattage stated on the rear panel. Do not connect high-wattage electrical home appliances such as electric irons, fans, or TVs to this outlet.

Hooking Up and Setting Up the Speaker System

This chapter describes how to hook up your speaker system to the receiver, how to position each speaker, and how to set up your speakers to enjoy Dolby Surround sound.



Brief descriptions of buttons and control used to set up the speaker system

I/⏻ switch: Press to turn on the receiver.

Cursor buttons (</>): Used to select the center mode after pressing the SET UP button.

SET UP button: Used to display "CTR MODE" when selecting the center mode.

BALANCE control: Used to adjust the front speaker balance while outputting a test tone.

SOUND FIELD ON/OFF button: Turns the sound field mode on or off.

SOUND FIELD MODE button: Used to select "PRO LOGIC" when adjusting the speaker volume.

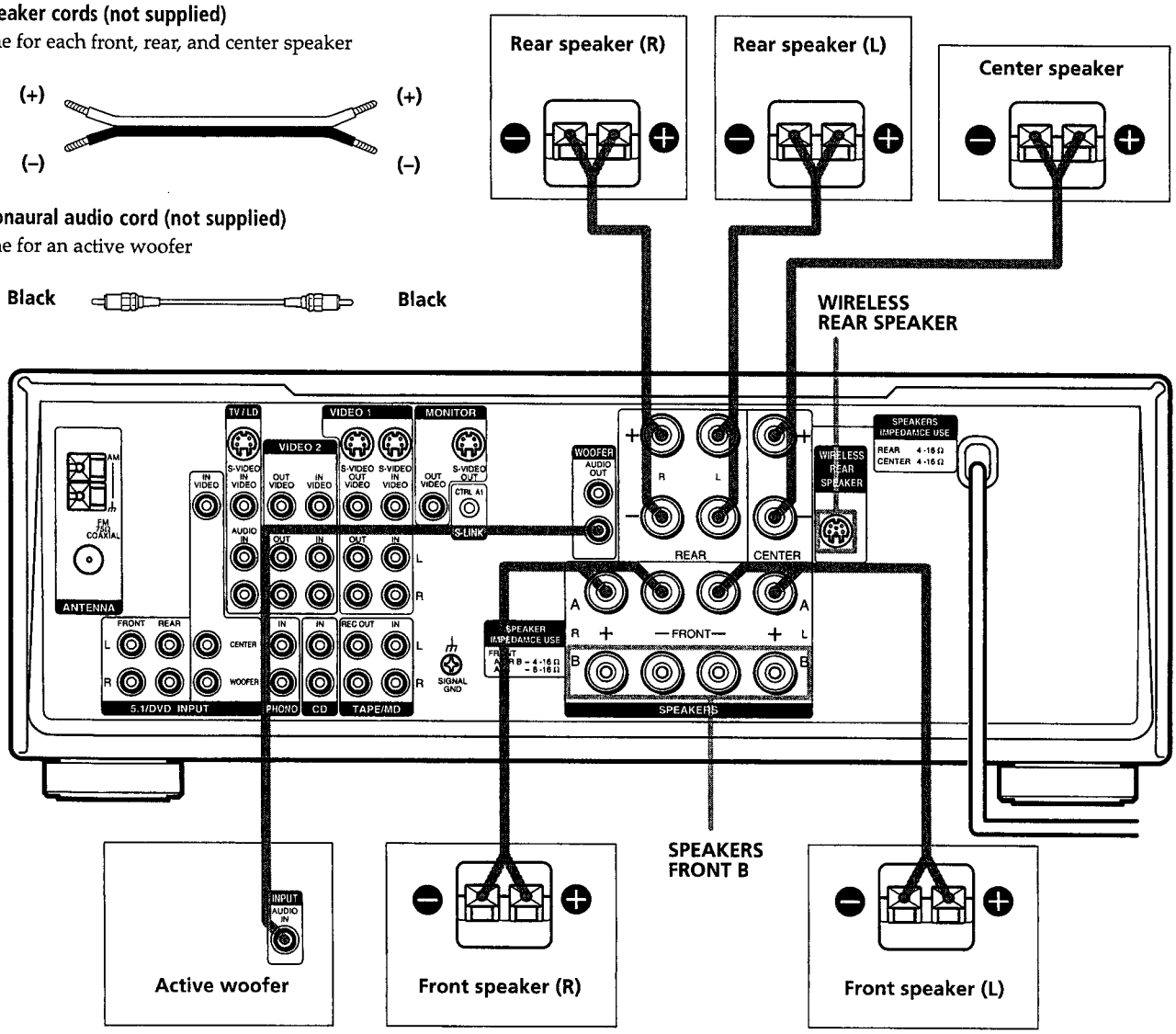
SOUND FIELD GENRE button: Used to select "CINEMA" when adjusting the speaker volume.

Speaker System Hookup

Required cords

Speaker cords (not supplied)
One for each front, rear, and center speaker

Monaural audio cord (not supplied)
One for an active woofer



Terminals for connecting the speakers

Connect the	To the
Front speakers	SPEAKERS FRONT A terminals
Additional pair of front speakers	SPEAKERS FRONT B terminals
Rear speakers	SPEAKERS REAR terminals
Center speaker	SPEAKERS CENTER terminals
Active woofer	WOOFER AUDIO OUT jack*
Wireless rear speaker transmitter	WIRELESS REAR SPEAKER jack

* *You can connect the active woofer to either of the two jacks. The remaining jack can be used to connect a second active woofer.*

Notes on speaker system hookup

- Twist the stripped ends of the speaker cords about 15 mm. Be sure to match the speaker cord to the appropriate terminal on the components: + to + and – to –. If the cords are reversed, the sound will be distorted and will lack bass.
- If you use front speakers with low maximum input rating, adjust the volume carefully to avoid excessive output on the speakers.
- If you are not using a Sony wireless rear speaker system, do not connect any other component to the WIRELESS REAR SPEAKER jack.

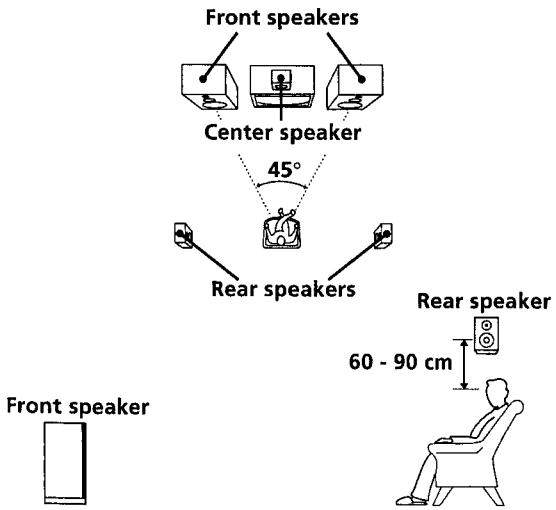
Dolby Surround Setup

Dolby Pro Logic Surround is a system for decoding Dolby Surround sound that is standardized for TV programs and movies. By selecting the proper center mode and adjusting the speaker volume (see this page and page 13), you can reproduce highly precise localization and dynamic panning of sounds of Dolby Pro Logic Surround-encoded software.

To obtain the best possible surround effect, you will require at least one additional pair of speakers and / or a center speaker.

Locating the speakers

For optimum Dolby Pro Logic Surround sound, locate your speakers as shown below.



Selecting the center mode

The receiver offers you four center modes: PHANTOM, 3CH LOGIC, NORMAL, and WIDE. Each mode is designed for a different speaker configuration. Select the mode that best suits the speakers you use.

1 Press I/⏻ to turn on the receiver and open the front cover to access the buttons inside.

2 Press SET UP repeatedly until "CTR MODE" (center mode) appears in the display.

3 Press the cursor buttons (< or >) to select the center mode you want.

A description of each center mode is as follows:

If you have	Select	So that
Front and rear speakers, but no center speaker	PHANTOM	The sound of the center channel is output from the front speakers
Front and center speakers, but no rear speaker	3CH LOGIC (3-STEREO)	The sound of the rear channel is output from the front speakers
Front and rear speakers, and a small center speaker	NORMAL	The bass sound of the center channel is output from the front speakers (because a small speaker cannot produce enough bass)
Front and rear speakers, and a center speaker that is equivalent to your front speakers	WIDE	Dolby Pro Logic Surround sound is fully reproduced

Adjusting the speaker volume

The test tone feature lets you set the volume of your rear speakers and / or center speaker to the same level as that of the front speakers to maximize the Dolby Pro Logic Surround effect. (If all of your speakers are equal in performance, you don't have to adjust the speaker volume.)

Using the controls on the remote, you can adjust the volume level from wherever you're listening.

1 Make sure that the center mode is correctly set (see the table on this page).

2 Press SOUND FIELD ON/OFF to turn on the sound field.

3 Press SOUND FIELD GENRE repeatedly to select "CINEMA."

4 Press SOUND FIELD MODE repeatedly to select "PRO LOGIC."

5 Press TEST TONE on the supplied remote.
You will hear a test tone (see this page) from each speaker sequentially.

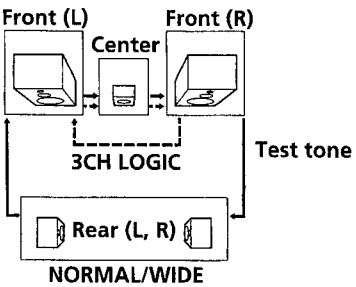
6 Adjust the volume level so that the volume of the test tone from each speaker sounds the same from where you are listening.
- To adjust the balance of the front right and front left speakers, use the BALANCE control on the front of the main unit.
- To adjust the volume level of the center speaker, press the LEVEL CENTER +/– buttons on the remote.
- To adjust the volume level of the rear speakers, press the LEVEL REAR +/– buttons on the remote.

7 Press TEST TONE on the remote again to turn off the test tone.

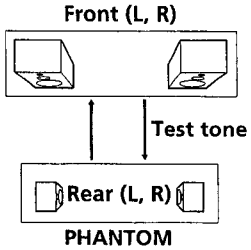
You can adjust the volume level of all speakers at the same time
Rotate MASTER VOLUME on the main unit or press MASTER VOL(UME) +/– on the remote.

What is a test tone?
A test tone is a signal that is produced by the receiver and used to adjust speaker volume. The test tone is output from speakers in the following two ways:

- **When NORMAL, WIDE, or 3CH LOGIC mode is selected**
  The test tone is output from the front L (left), center, front R (right), and rear speakers (except for 3CH LOGIC mode) in succession.



- **When PHANTOM mode is selected**
  The test tone is output from the front and the rear speakers alternately.



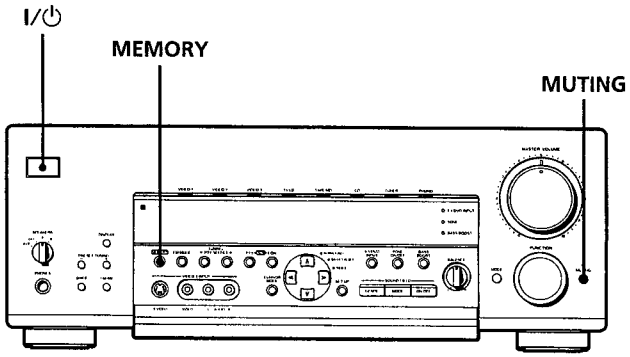
See the table on page 24 for information on the output of the test tone for sound fields other than PRO LOGIC.

Before turning on the receiver

Make sure that you have:
- Turned MASTER VOLUME to the leftmost position (0).
- Selected the appropriate front speakers (see "[7] SPEAKERS selector" on page 17).
- Set BALANCE to the center position.

Clearing the receiver's memory

Before you use your receiver for the first time or when you want to clear the receiver's memory, do the procedure below.

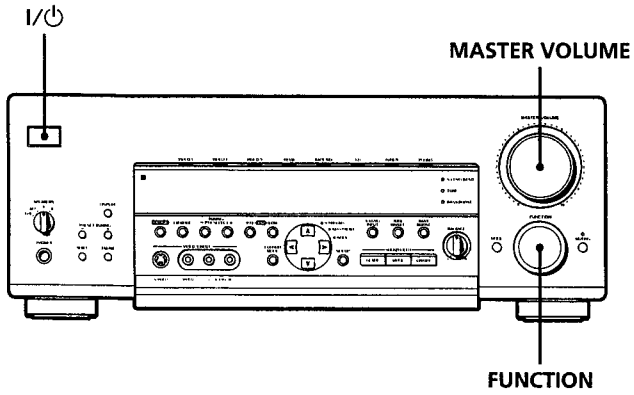


1 Turn off the receiver.

2 While pressing down MEMORY and MUTING, press I/⏻ to turn on the receiver.
"ALL CLEAR" appears in the display and the items including the following are reset or cleared:
- All preset stations are reset to their factory settings.
- All sound field parameters are reset to their factory settings.
- All index names (of preset stations and program sources) are cleared.
- All adjustments made with the SET UP button are reset to their factory settings.
- The sound field memorized for each program source and preset station is cleared.

Checking the connections

After connecting all of your components to the receiver, do the procedure below to verify that the connections are correctly made.



1 Press I/⏻ to turn on the receiver.

2 Rotate FUNCTION to select a component (program source) that you have connected (e.g., CD player or tape deck).

3 Turn on the component and start playing it.

4 Rotate MASTER VOLUME to turn up the volume.

If you did not obtain normal sound output after performing the procedure above, look for the reason in the following check-list and take the appropriate measures to correct the problem.

There's no sound no matter which component is selected.

- ➡ Check that both the receiver and all components are turned on.
- ➡ Check that the MASTER VOLUME control is not set at 0.
- ➡ Check that the SPEAKERS selector is not set at OFF or at a position for front speakers that are not connected to the receiver (see "[7] SPEAKERS selector" on page 17).
- ➡ Check that all the speaker cords are connected correctly.
- ➡ Press the MUTING button to turn off the MUTING indicator.

There's no sound from a specific component.

- ➡ Check that the component is connected correctly to the audio input jacks for that component.
- ➡ Check that the cord(s) used for the connection is (are) inserted fully into the jacks on both the receiver and the component.

No sound is heard from one of the front speakers.

- ➡ Check that the BALANCE control is set at center position (see "[6] BALANCE control" on page 17).
- ➡ Connect a pair of headphones to the PHONES jack and set the SPEAKERS selector to OFF to verify that sound is output from the headphones (see "[7] SPEAKERS selector" and "PHONES jack" on page 17).

  If only one channel is output from the connected headphones, the component and the receiver may not be connected correctly. Check that all the cords are fully inserted into the jacks on both the receiver and the component.

  If both channels are output from the headphones, the front speaker may not be connected to the receiver correctly. Check the connection for the front speaker from which no sound is output.

If you encounter a problem that is not included above, see "Troubleshooting" on page 34.

Location of Parts and Basic Amplifier Operations

This chapter gives you the information on the location and function of the buttons and controls on the front panel and explains basic amplifier operations.

Front Panel Parts Description

[1] I/⏻ switch

Press to turn the receiver on and off.

Note

Before you turn on the receiver, make sure that you have turned the MASTER VOLUME control to the leftmost position to avoid damaging your speakers.

[2] FUNCTION control

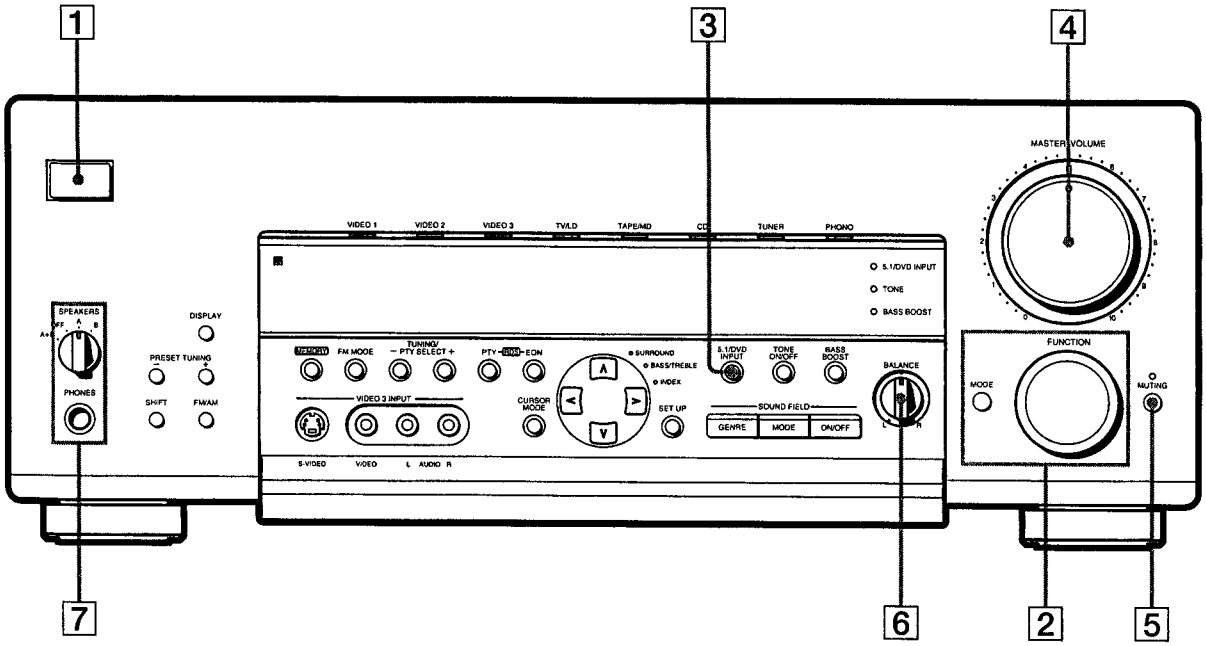
Rotate to select the component you want to use.

To select	Rotate to light up
VCR	VIDEO 1 or VIDEO 2
Camcorder or video game	VIDEO 3
TV or LD player	TV/LD
Tape deck or MD deck	TAPE/MD
CD player	CD
Built-in tuner	TUNER
Turntable	PHONO

After selecting the component, turn on the component you selected and play the program source.

Notes

- After you have selected VCR, camcorder, video game, or LD player, turn on the TV and set the TV's video input to match the component you selected.
- Press the 5.1/DVD INPUT button to select the component connected to the 5.1/DVD INPUT jacks (see "[3] 5.1/DVD INPUT button" on page 17).



MODE button

Press to select and play a video/audio source in combination with the selected component.
Each time you press the button, the indication on the display window changes as follows:

→ V-XXX → A-XXX → Selected component →

Press MODE repeatedly to display	And rotate FUNCTION to select
V-XXX	Any video source to enjoy with the audio from the selected component
A-XXX	Any audio source to enjoy with the video from the selected component

3 5.1/DVD INPUT button

Press to select the component connected to the 5.1/DVD INPUT jacks. The 5.1/DVD INPUT indicator lights up when the component is selected.

Note

When the 5.1/DVD INPUT indicator lights up, tone, bass booster, and the sound field effects do not function.

4 MASTER VOLUME control

After turning on the component you selected, rotate to adjust the volume.

5 MUTING button

Press to mute the sound. The MUTING indicator lights up when the sound is muted.

6 BALANCE control

Rotate to adjust the balance of the front speakers.

7 SPEAKERS selector

Set according to the front speakers you want to drive.

To select	Set to
Speakers connected to the SPEAKERS FRONT A terminals	A
Speakers connected to the SPEAKERS FRONT B terminals	B
Speakers connected to both the SPEAKERS FRONT A and B terminals (parallel connection)	A+B*
No front speaker output	OFF

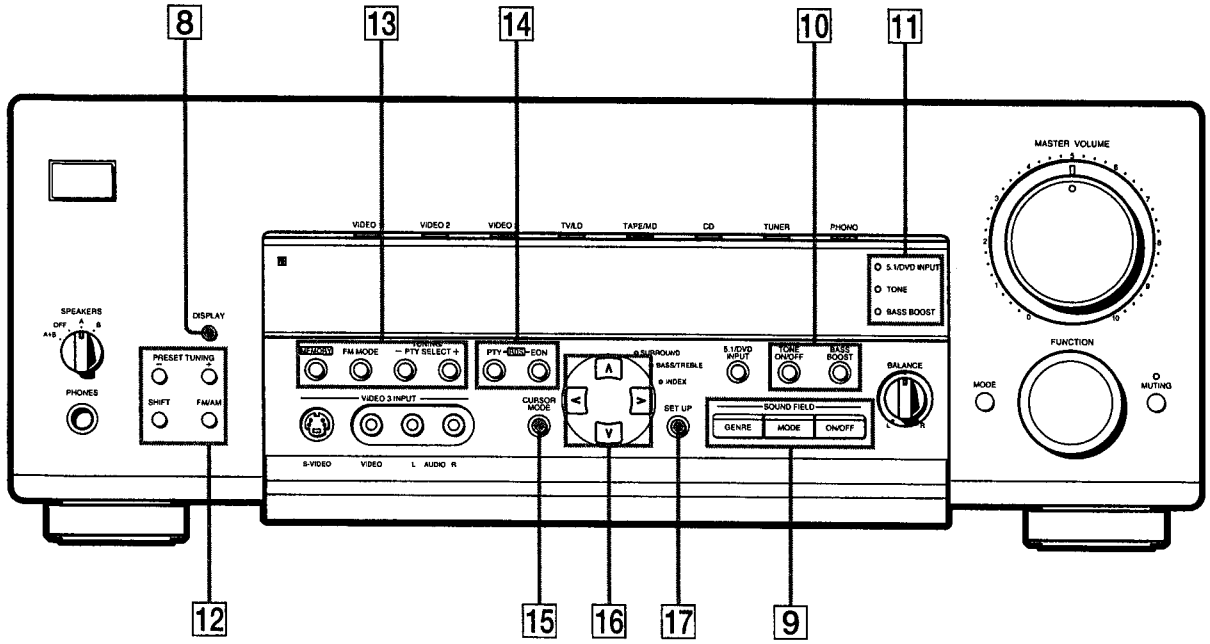
* *Do not set to A+B when a sound field is turned on.*

PHONES jack

Connects headphones.

Note

To use the headphones, set the SPEAKERS selector to OFF to output sound to the headphones.



8 DISPLAY button

Press repeatedly to change the information on the display window as follows:

When a component other than tuner is selected

Index name of the component*

↓

Selected component

↓

Sound field applied to the component

When the tuner is selected

Index name of the preset station* or program station name**

↓

Frequency

↓

Program type indication**

↓

Radio text**

↓

Current time**

↓

Sound field applied to the band or the preset station

* *Index name appears only when you have assigned one to the component or the preset station (see page 32).*

***These indications appear only during RDS reception (see page 28).*

9 Use the following buttons to enjoy surround sound. For details, see "Enjoying Surround Sound" starting from page 20.

SOUND FIELD GENRE button

Press repeatedly to select "CINEMA" or "MUSIC" sound field group.

SOUND FIELD MODE button

Press to select a sound field from the group you selected.

SOUND FIELD ON/OFF button

Press to turn the sound field on or off.

10 TONE ON/OFF button

Press to turn the tone effect on or off. The TONE indicator lights up while the tone effect is turned on. Note that if you have adjusted the tone using the CURSOR MODE button and cursor buttons, the adjusted tone will be produced whenever you turn on the tone effect.

BASS BOOST button

Press to increase the bass of the front speakers. The BASS BOOST indicator lights up when the function is turned on.

When you want to enjoy high quality sound

Do the procedure below to bypass the sound control circuits.

1 Set SOUND FIELD ON/OFF to OFF.

2 Set TONE ON/OFF to OFF.

3 Set BASS BOOST to OFF.

The result will be a two-channel stereo sound output from the front speakers that is highly faithful to the program source.

11 5.1/DVD INPUT indicator

Lights up when the component connected to the 5.1/DVD INPUT jacks is selected.

TONE indicator

Lights up while the tone effect is turned on.

BASS BOOST indicator

Lights up while the bass booster is turned on.

12 The following buttons operate the built-in tuner. For details, see "Receiving Broadcasts" starting from page 25. Note that these buttons are operable only when the tuner is selected.

PRESET TUNING +/– buttons

Press to select a preset number or to scan all preset stations.

SHIFT button

Selects a memory page for preset stations.

FM/AM button

Selects the FM or AM band.

13 The following buttons operate the built-in tuner. For details, see "Receiving Broadcasts" starting from page 25. Note that these buttons are operable only when the tuner is selected.

MEMORY button

Press to perform Auto-betical Select or to memorize a preset station.

FM MODE button

If "STEREO" flashes in the display and the FM stereo reception is poor, press this button. You will not have the stereo effect but the sound is improved.

TUNING/PTY SELECT +/– buttons

Press to scan all the available radio stations or to scan the stations by program type.

14 The following buttons operate the built-in tuner. For details, see "Receiving Broadcasts" starting from page 25. Note that the PTY button is operable only when the tuner is selected.

PTY button

Press to scan stations by program type.

EON button

Press to automatically switch to a station currently broadcasting traffic announcements, news, or information program. The EON button does not function during AM reception.

15 CURSOR MODE button

Press this button repeatedly to select any of the following three cursor modes. The indicator for the selected cursor mode lights up. The indicator turns off when you press the SET UP button.

When the cursor mode is	You can
SURROUND	Change the delay time, effect level, and the volume of the rear and center speakers (page 23)
BASS/TREBLE	Adjust the tone (bass/treble) for the front speakers (page 23). Press the TONE ON/OFF button to activate the tone effect.
INDEX	Enter an index name for preset stations and program sources (page 32)

16 Cursor buttons (∧/∨/</>)

After pressing the CURSOR MODE or SET UP button, use these buttons to make specific settings (see pages 12, 23, and 32 to 34).

17 SET UP button

Press this button repeatedly to select any of the following three indications. The selected indication appears in the display and you will be able to make various settings using the cursor buttons.

When you've displayed	You can
CTR MODE	Select any one of the four center modes (page 12)
DSPL SET UP	Set the display at any of four levels of brightness (page 33)
REAR GAIN	Increase the range of rear speakers by 5 dB (page 33)

Enjoying Surround Sound

This chapter describes how to set up the receiver to enjoy surround sound. You can enjoy the Dolby Surround-encoded software using this receiver.

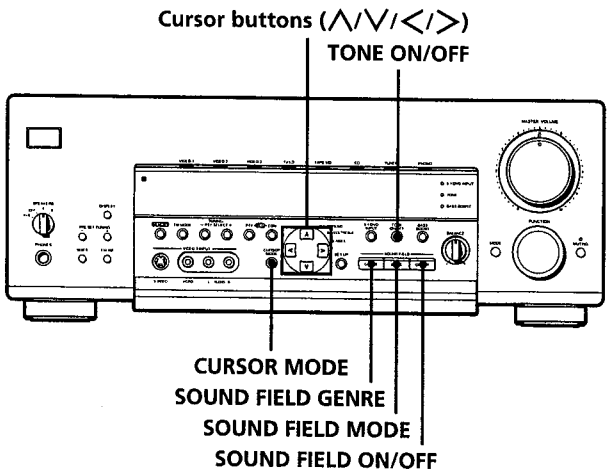
You can take advantage of surround sound simply by selecting one of the pre-programmed "sound fields" that your receiver provides. You can enjoy the sound of a movie theater or concert hall in your own home. You can even customize a sound field by adjusting its parameters.

Sound fields are classified into two genres.

One genre is "CINEMA." The CINEMA-genre sound fields are designed for enjoying movies recorded on videos or laser discs. Six sound fields are included in the CINEMA genre and they are grouped into two types. PRO LOGIC sound field can be used to reproduce plain surround sound. When you select the PRO LOGIC sound field, the receiver decodes the software that is encoded using the Dolby Pro Logic system to obtain surround sound. The surround sound is reproduced in the exact way that the sound engineer of the software intended. Other sound fields in the CINEMA genre are designed to add more reverberation effects by incorporating Digital Cinema Sound technology. When you select these sound fields, the receiver adds the reflection and reverberation effects that are typical in movie theaters to the decoded Dolby Pro Logic Surround sound. You can enjoy the sound that you would experience in the movie theater.

Another genre is "MUSIC." When a sound field in this genre is selected, the receiver adds the reverberation to the normal 2-channel stereo sound. You can apply these sound fields when playing a CD or watching TV programs to obtain the surround effects of concert hall or a stadium.

To enjoy Dolby Pro Logic Surround sound fully, do the procedure on "Dolby Surround Setup" starting from page 12 to select the center mode and adjust the speaker volume.



Brief descriptions of buttons used to enjoy surround sound

Cursor buttons (∧/∨/</>): After pressing the CURSOR MODE button or SET UP button, use these buttons to make the actual setting.

TONE ON/OFF button: Turns the tone effect on or off.

SOUND FIELD ON/OFF button: Turns the sound field on or off.

SOUND FIELD MODE button: Press to select the sound field from the group you selected.

SOUND FIELD GENRE button: Press to select the sound field group (genre) that you want.

CURSOR MODE button: Press repeatedly to light up the SURROUND indicator or BASS/TREBLE indicator to customize a sound field.

Note

These buttons become inoperable while the 5.1/DVD INPUT indicator is lit.

Selecting a Sound Field

You can enjoy surround sound simply by selecting one of the pre-programmed sound fields according to the program you want to listen to.

1 Press SOUND FIELD ON/OFF to turn on the sound field.

The current sound field is indicated in the display.

2 Press SOUND FIELD GENRE repeatedly to select the sound field group (genre), then press SOUND FIELD MODE repeatedly to select the sound field you want.

See the table on page 22 for information on each sound field.

The receiver memorizes the last sound field selected for each program source (Sound Field Link)

Whenever you select a program source, the sound field that was last applied is automatically applied again. For example, if you listen to CD with STADIUM as the sound field, change to different program source, then return to CD, STADIUM will be applied again. In the case of the tuner, the sound fields for AM or FM band and for all the preset stations are memorized separately.

You can identify Dolby Surround-encoded software by looking at the packaging

Some videos and laser discs, however, may be encoded with Dolby Surround sound even if it's not indicated on the package.

Notes

- When using sound fields, do not select both speakers (A+B) with the SPEAKERS selector.
- Sound fields are turned off whenever the program source connected to the 5.1/DVD INPUT jacks is selected.

Description of sound fields

GENRE (type)	MODE (sound field)	Effects
CINEMA	PRO LOGIC	Decodes programs processed with Dolby Pro Logic Surround
	C(inema) STUDIO A	Reproduces the sound characteristics of a movie theater. Great for watching standard movies.
	C(inema) STUDIO B	Reproduces the sound characteristics of a movie theater. Great for SFX or action movies with lots of sound effects.
	C(inema) STUDIO C	Reproduces the sound characteristics of a theater. Great for musicals and classical music concerts.
	N(ight) THEATER	Adjusts the tone for watching a movie at low volume at nighttime
	MONO MOVIE	Creates a theater-like environment when watching movies with monaural soundtracks
MUSIC	HALL	Reproduces the acoustics of a rectangular concert hall. Great for soft acoustic sounds.
	JAZZ CLUB	Reproduces the acoustics of a jazz club
	DISCO	Reproduces the acoustics of a discotheque
	CHURCH	Reproduces the acoustics of a stone church
	LIVE HOUSE	Reproduces the acoustics of a 300-seat live house
	ARENA	Reproduces the acoustics of a 1,000-seat concert hall. Great for rock or pop music.
	STADIUM	Reproduces the feeling of a large open-air stadium. Great for sporting events or electric sounds.
	GAME	Obtains maximum audio impact from video game software. Be sure to set the game machine to stereo mode for game software with stereo sound capability.

Customizing Sound Fields

By adjusting some of the sound parameters, you can customize sound fields to suit your particular listening situation.

Once you customize a sound field, the changes are stored in memory indefinitely (unless the receiver is unplugged for about one week). You can change a customized sound field any time by making new adjustments to the parameters.

See the table on page 24 for adjustable parameters for each sound field.

To get the most from Dolby Pro Logic Surround sound

Do the procedures "Selecting the center mode" and "Adjusting the speaker volume" on pages 12 and 13 before you customize a sound field.

Changing the delay time (DELAY) (PRO LOGIC sound field only)

You can enhance the Dolby Pro Logic Surround sound even more by delaying the sound output from the rear speakers (delay time). You can select a delay time of 15, 20, or 30 ms. Set a short delay time when the rear speakers are located in a large room or far from where you are listening.

1 Start playing a program source encoded with Dolby Surround sound.

2 Press CURSOR MODE repeatedly until the SURROUND indicator lights up.

3 Use the cursor buttons (∧/∨) to select "DELAY xxms."
The current delay time appears in the display.

4 Use the cursor buttons (</>) to change the delay time.

Changing the level of effect (EFFECT) (all sound fields except PRO LOGIC)

You can specify the amount of the surround effect (i.e., its overall presence) in six levels.

1 Press CURSOR MODE repeatedly until the SURROUND indicator lights up.

2 Use the cursor buttons (∧/∨) to select "EFFECT."
The current effect level appears in the display.

3 Use the cursor buttons (</>) to change the effect level.

Adjusting the volume of the rear and center speakers (REAR/CENTER)

If you feel the volume of the rear or center speaker is inadequate (even after adjusting the speaker volume for Dolby Pro Logic Surround), do the procedure below to adjust the volume.
Note that the speaker volume adjustment is applied to all sound fields.

1 Press CURSOR MODE repeatedly until the SURROUND indicator lights up.

2 Use the cursor buttons (∧/∨) to select "REAR xxdB" or "CENTER xxdB."

3 Use the cursor buttons (</>) to adjust the speaker volume.
You can select a volume level of –15 dB to +10 dB in 1 dB steps.

Adjusting the tone (BASS/TREBLE)

Adjust the tone (bass or treble) of the front speakers for optimum sound. You can adjust the tone for each separate sound field.

1 Press CURSOR MODE repeatedly until the BASS/ TREBLE indicator lights up.

2 Use the cursor buttons (∧/∨) to select "BASS xxdB" or "TREBLE xxdB."

3 Use the cursor buttons (</>) to adjust the tone level.
You can select a tone level of –10 dB to +10 dB in 2 dB steps.

4 Press TONE ON/OFF so that the TONE indicator lights up.

You can turn off the tone adjustments without erasing them
The tone adjustments are stored separately for each sound field. Press the TONE ON / OFF button to turn the TONE indicator off.

Resetting customized sound fields to the factory settings

1 If the power is on, press I/⏻ to turn off the power.

2 Hold down SOUND FIELD ON/OFF and press I/⏻.
"SUR CLEAR" appears in the display and all sound fields are reset at once.

Adjustable parameters for each sound field

Sound field	GENRE	MODE	Parameters					Test tone output
			DELAY	EFFECT	REAR*	CENTER**	TONE	
Off	—	—					●	From the front speakers
On	CINEMA	PRO LOGIC	●		●	●	●	Depends on center mode (see page 13)
		C STUDIO A		●	●	●	●	
		C STUDIO B		●	●	●	●	
		C STUDIO C		●	●	●	●	
		N THEATER		●	●		●	From the front and the rear speakers alternately
		MONO MOVIE		●	●		●	
	MUSIC	HALL		●	●		●	
		JAZZ CLUB		●	●		●	
		DISCO		●	●		●	
		CHURCH		●	●		●	
		LIVE HOUSE		●	●		●	
		ARENA		●	●		●	
		STADIUM		●	●		●	
		GAME		●	●		●	

* *Adjustable only when the center mode is set to PHANTOM, NORMAL, or WIDE (see page 12).*

***Adjustable only when the center mode is set to 3CH LOGIC, NORMAL, or WIDE (see page 12).*

Test tone output when the component connected to the 5.1/ DVD INPUT jacks is selected

The test tone is successively output from the speakers in the following order: front (L), center, front (R), rear (R), rear (L). The volume level of the center and rear speakers cannot be adjusted at this time.

Note

To adjust the speaker volume using a test tone as described on pages 12 and 13, select the PRO LOGIC sound field. The test tone output in all other sound fields is used for verifying whether there is output from speakers or not.

Receiving Broadcasts

This chapter describes how to receive FM or AM broadcasts, how to preset the stations, and how to use RDS services.

Auto-betical Select

You can automatically preset up to 30 FM or FM RDS stations in alphabetical order at a time without redundancy. Additionally, the receiver only stores the stations with the strongest signals (see page 26).

Tuning methods

You can tune in stations on this receiver in the following ways:

Direct Tuning

You can enter a frequency of the station you want directly by using the numeric buttons on the supplied remote (see page 26).

Automatic Tuning

If you don't know the frequency of the station you want, you can let the receiver scan all available stations in your area (see page 27).

Preset Tuning

After tuning in stations using Direct Tuning or Automatic Tuning, you can preset them in the receiver (see page 27). Then you can tune in any of the stations directly by entering its 2-character code (see page 28). You can preset up to 30 stations (FM and AM). The receiver will also scan all the stations that you have preset (see page 28).

RDS function

This receiver also allows you to use RDS (Radio Data System), which enables radio stations to send additional information along with the regular program signal. You can use the following three convenient RDS features:

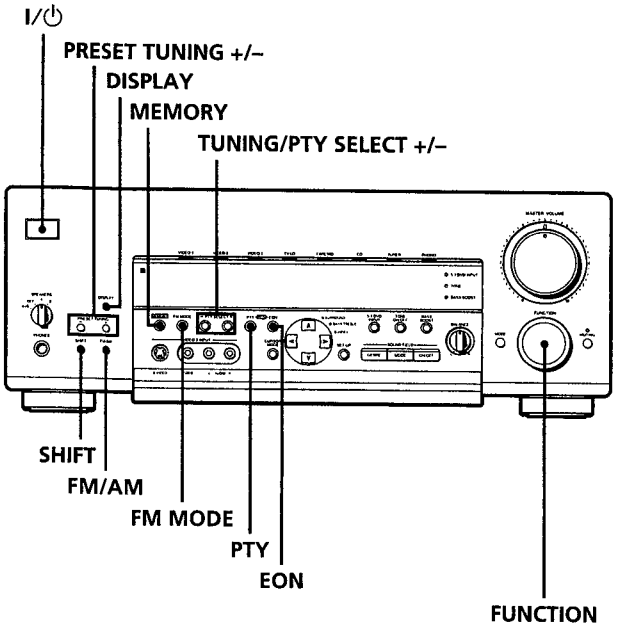
— Displaying RDS information (see page 28)
— Scanning preset stations by program type (see page 29)
— Using the EON function (see page 29).

Note that RDS is operable only for FM stations*.

* *Not all FM stations provide RDS service, nor do they provide the same types of services. If you are not familiar with the RDS services in your area, check with your local radio stations for details.*

Before you begin, make sure you have:

- Connected an FM and AM antenna to the receiver (see page 5).
- Selected the appropriate speaker system (see page 17).



Brief descriptions of buttons used to receive broadcasts

I/⏻ switch: Used to perform Auto-betical Select.

PRESET TUNING +/– buttons: Press to select a preset number or to scan all preset radio stations.

DISPLAY button: Press to display the RDS information.

MEMORY button: Used to perform Auto-betical Select or for memorizing preset stations.

TUNING/PTY SELECT +/– buttons: Press to scan all available radio stations or to scan the stations by program type.

FUNCTION control: Rotate to select the tuner.

EON button: Press to automatically switch the stations.

PTY button: Press to scan preset stations by the program type.

FM MODE button: If "STEREO" flashes in the display and the FM stereo reception is poor, press this button so that "MONO" appears in the display. You will not be able to enjoy stereo effect but the sound will be improved.

Note

If "STEREO" does not appear at all even when the FM broadcast is received normally, press this button to turn on the "STEREO" indication.

FM/AM button: Press to select the FM or AM band.

SHIFT button: Press to select a memory page (A, B, or C) for presetting radio stations or tuning to preset stations.

Presetting FM Stations Automatically (Auto-betical Select)

For details on the buttons used in this section, see "Brief descriptions of buttons used to receive broadcasts" on this page.
If you want to preset FM or AM stations one by one, see "Presetting radio stations" on page 27.

1 Press I/⏻ to turn off the receiver.

2 While pressing down MEMORY, press I/⏻ to turn on the receiver.
"AUTO-BETICAL SELECT" appears in the display and the receiver scans and stores all the FM and FM RDS stations in the broadcasting area.

For RDS stations, the receiver first checks for stations broadcasting the same program, then stores only the one with the strongest signal. The selected RDS stations are sorted alphabetically by the Program Station (PS) name, then assigned a 2-character preset code. For details on RDS, see page 28.
Regular FM stations are assigned a 2-character code and stored after the RDS stations.

When done, "FINISH" appears in the display for a few seconds, and the receiver returns to normal operation.

To change a preset code to another station
See "Presetting radio stations" on page 27.

Notes

- Do not press any button until the receiver finishes scanning the stations.
- If you move to another area, repeat the procedure above to store the stations in your new area.
- For details on tuning to the preset stations, see page 28.

Direct Tuning

For details on the buttons used in this section, see "Brief descriptions of buttons used to receive broadcasts" on this page.

1 Rotate FUNCTION to select the tuner.
The last received station is tuned in.

2 Press FM/AM to select the FM or AM band.

3 Select the tuner on the supplied remote.

4 Press D.TUNING ENTER (or ENTER D.TUNING) on the supplied remote.

5 Press the numeric buttons on the remote to enter the frequency.

Example 1: FM 102.50 MHz

① → ⓪ → ② → ⑤ → ⓪

Example 2: AM 1350 kHz

① → ③ → ⑤ → ⓪

If you cannot tune in a station and the entered numbers flash

Make sure you've entered the right frequency. If not, repeat Steps 4 and 5.

If the entered numbers still flash, the frequency is not used in your area.

6 If you've tuned in an AM station, adjust the direction of the AM loop antenna for optimum reception.

7 Repeat Steps 2 to 6 to receive another station.

If you try to enter a frequency that is too precise for the tuning scale

The entered value is automatically rounded up or down.

Tuning scale for direct tuning is:
FM: 50 kHz
AM: 9 kHz

Automatic Tuning

For details on the buttons used in this section, see "Brief descriptions of buttons used to receive broadcasts" on page 26.

1 Rotate FUNCTION to select the tuner.
The last received station is tuned in.

2 Press FM/AM to select the FM or AM band.

3 Press TUNING/PTY SELECT + or TUNING/PTY SELECT –.
Press the + button to scan from low to high; press the – button to scan from high to low.

When the receiver reaches either end of the band

Scanning is repeated in the same direction.

The receiver stops scanning whenever a station is received.

4 To continue scanning, press TUNING/PTY SELECT + or TUNING/PTY SELECT – again.

Preset Tuning

For details on the buttons used in this section, see "Brief descriptions of buttons used to receive broadcasts" on page 26.

Before you can tune in a preset station or scan preset stations by program type, first do the procedure "Presetting radio stations" below.

Presetting radio stations

1 Rotate FUNCTION to select the tuner.
The last received station is tuned in.

2 Tune in the station that you want to preset using Direct Tuning (page 26), or Automatic Tuning (this page).

3 Press MEMORY.
The MEMORY indicator lights up.
Do Steps 4 to 6 before the indicator turns off.

4 Press SHIFT to select a memory page (A, B or C).
Each time you press the SHIFT button, the letter "A," "B" or "C" appears in the display.

5 Press PRESET TUNING + or PRESET TUNING – to select a number.
If the MEMORY indicator turns off before you select a number, start again from Step 3.

6 Press MEMORY again to preset the station.
The MEMORY indicator turns off.

7 Repeat Steps 2 to 6 to preset another station.

To change a preset code to another station

Do Steps 1 to 6 to preset the new station to the code.

Note

If the AC power cord is disconnected for about one week, all the preset stations will be cleared from the receiver's memory, and you will have to preset the stations again.

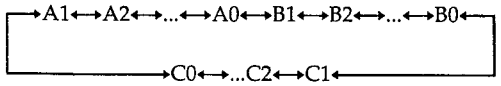
Tuning to preset stations

You can tune to the preset stations by either of the following two ways.

Tuning by scanning preset stations

1 Rotate FUNCTION to select tuner.
The last received station is tuned in.

2 Press PRESET TUNING + or PRESET TUNING – repeatedly to select the preset station you want.
Each time you press the button, the receiver tunes in one preset station at a time, in the corresponding order and direction as follows:



You can scan the preset stations by program type
See page 29.

Tuning to preset stations using preset codes

1 Rotate FUNCTION to select the tuner.
The last received station is tuned in.

2 Press SHIFT to select a memory page (A, B or C), then press the preset number of the station you want using the numeric button on the supplied remote.

Using the Radio Data System (RDS)

Receiving RDS broadcasts

Simply select a station on the FM band (see page 26 to this page).
When you tune in a station that provides RDS services, the RDS indicator lights up and the program station name appears in the display.

Note
RDS may not work properly if the station you tuned to is not transmitting the RDS signal properly or if the signal strength is weak.

Displaying RDS information

While receiving an RDS station, press DISPLAY repeatedly to change the RDS information on the display window as follows:

PS (Program Station name)[a)]
↓
Frequency[a)]
↓
PTY (Program TYpe) indication[b)]
↓
RT (Radio Text) indication[c)]
↓
CT (Current Time) indication (in 24-hour system)
↓
Sound field currently applied[a)]

a) This information also appears for non-RDS FM stations.
b) Type of program being broadcast (See page 30.)
c) Text messages sent by the RDS station

Notes
- If there is an emergency announcement by government authorities, "ALARM" flashes in the display.
- If a station does not provide a particular RDS service, "NO XX" (such as "NO CT") appears in the display.
- When a station broadcasts radio text data, it is displayed at the same rate at which it is sent from the station. Any change in this rate is reflected in the display rate of the data.

Scanning preset stations by program type

You can tune in preset stations according to a program type that you specify. The receiver scans for stations in its preset memory currently broadcasting the specified program type.

1 Press PTY.

2 Press TUNING/PTY SELECT + or TUNING/PTY SELECT – to select the program type.
See the table on page 30 for information on each program type.

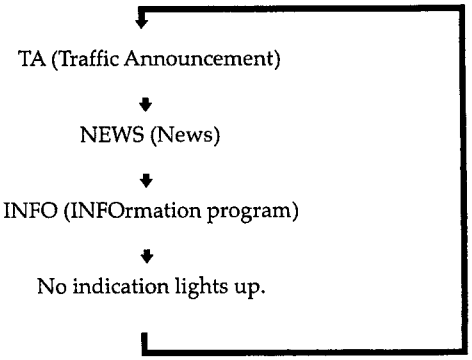
3 Press PTY.
While the receiver is scanning stations, "SEARCH" and the program type indication appear alternately in the display window.
When the receiver finds a station, the receiver stops scanning.
When the receiver could not find any preset stations currently broadcasting the specified program type, "NO PTY" appears in the display.

Using the EON function

The EON (Enhanced Other Network) function allows the receiver to switch automatically to a station currently broadcasting traffic announcements, news, or information programs. When such a program starts on a station networking with the preset FM RDS station, the receiver automatically tunes in the station.
After the program ends, the receiver switches back to the original preset station or the program source you were originally listening to.

1 Tune in a preset FM RDS station so that the RDS indicator lights up.

2 Press EON repeatedly to select the type of the program to be tuned in.
Each time you press the EON button, the indication for the type of the program lights up alternately as shown below.



After selecting the type of the program, you can select any other component.
When the receiver automatically tunes in the program, the indication that you've selected in Step 2 flashes in the display.

To stop listening to the program

Press EON during program reception. The indication that you've selected in Step 2 lights up and the receiver switches back to the program source or the station you were listening to.

To turn off the EON function

Press EON repeatedly in Step 2 above so that no program type indication lights up in the display.

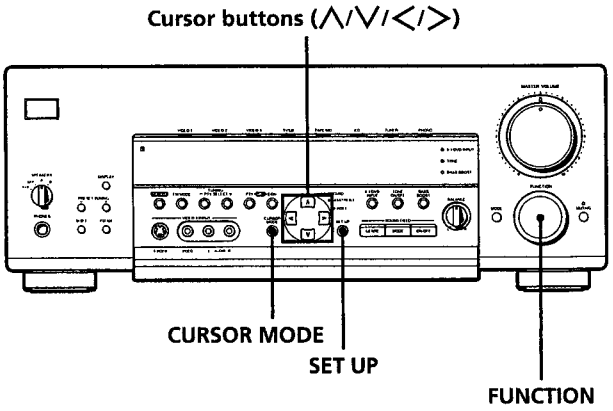
Notes

- After selecting the type of the program, if you tune in an AM station, the program type indication turns off and the receiver will no longer tune in the program.
- Be sure to turn off the EON function when you want to record a program without interruptions, especially when doing timer-activated recording.
- "WEAK SIG" appears in the display when the signal of the program is weak.

Description of program type

Program type indication	Description
NEWS	News programs
AFFAIRS	Topical programs that expand on current news
INFO	Programs offering information on a wide spectrum of subjects, including consumer affairs and medical advice
SPORT	Sports programs
EDUCATION	Educational programs, such as "how-to" and advice programs
DRAMA	Radio plays and serials
CULTURES	Programs about national or regional culture, such as language and social concerns
SCIENCE	Programs about the natural sciences and technology
VARIED	Other types of programs such as celebrity interviews, panel games, and comedy
POP MUSIC	Popular music programs
ROCK MUSIC	Rock music programs
EASY MUSIC	Easy Listening
LIGHT M	Instrumental, vocal, and choral music
CLASSICS	Performances of major orchestras, chamber music, opera, etc.
OTHER M	Music that does not fit into any categories above, such as Rhythm & Blues and Reggae
WEATHER	Weather information
FINANCE	Stock market reports and trading, etc.
CHILDREN	Programs for children
SOCIAL AFF	Programs about people and the things that affect them
RELIGION	Programs of religious content
PHONE IN	Programs where members of the public express their views by phone or in a public forum
TRAVEL	Programs about travel. Not for announcements that are located by TP/TA.
LEISURE	Programs on recreational activities such as gardening, fishing, cooking, etc.
JAZZ MUSIC	Jazz programs
COUNTRY M	Country music programs
NATIONAL M	Programs featuring the popular music of the country or region
OLDIES M	Programs featuring oldies music
FOLK MUSIC	Folk music programs
DOCUMENT	Investigative features
NONE	Any programs not defined above

Other Operations



Brief descriptions of buttons that appear in this chapter

Cursor buttons (∧/∨/</>): After pressing the SET UP button or CURSOR MODE button, use these buttons to make the actual setting.

FUNCTION control: Rotate to select a component.

SET UP button: Used to display "DIMMER" or "REAR GAIN" in order to make respective adjustment.

CURSOR MODE button: Used to light up the INDEX indicator to index preset stations or program sources.

Indexing Preset Stations and Program Sources

You can enter a name of up to 8 characters for preset stations (station index) and program sources. These index names (for example, "VHS") appear in the receiver's display when a station or program source is selected. This function is useful for distinguishing components of the same kind. For example, two VCRs can be specified as "VHS" and "8MM," respectively. It is also handy for identifying components connected to jacks meant for another type of component, for example, a second CD player connected to the TAPE/MD jacks.

Notes

- Not more than one name can be entered for each preset station or program source.
- You cannot index FM RDS stations or components connected to the 5.1/DVD INPUT jacks.

1 To index a preset station
Rotate FUNCTION to select the tuner.
The last station you received is tuned in.

To index a program source
Select the program source (component) to be named, then go to Step 3.

2 Tune in the preset station you want to create an index name for.
If you are not familiar with how to tune in preset stations, see "Tuning to preset stations" on page 28.

3 Press CURSOR MODE repeatedly until the INDEX indicator lights up.

4 Create an index name by using the cursor buttons as follows:
Press ∧ or ∨ to select a character, then press > to move the cursor to the next position.
The index name is stored automatically.

To insert a space
Press ∧ or ∨ until a blank space appears in the display (the space character is between "]" and "A").

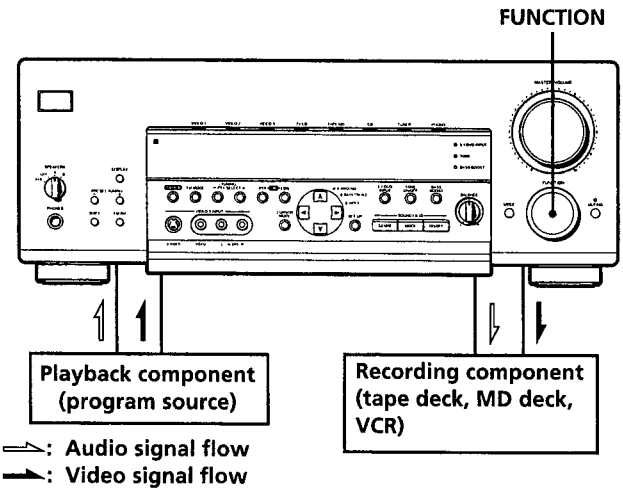
If you've made a mistake
Press < or > repeatedly until the character to be changed flashes, then select the right character.

To assign index names to other stations
Repeat Steps 2 to 4.

Recording

Your receiver makes it easy to record to and from the components connected to it. You don't have to connect the playback and recording components directly to each other: once you select a program source on the receiver, you can record and edit as you normally would using the controls on each component.

Before you begin, make sure you've connected all components properly.


FUNCTION
Playback component (program source)
Recording component (tape deck, MD deck, VCR)
: Audio signal flow
: Video signal flow

Recording on an audio tape or MiniDisc

You can record on a cassette tape or MiniDisc using the receiver. See the instruction manual of your cassette deck or MD deck if you need help.

1 Select the component to be recorded.

2 Prepare the component for playing.
For example, insert a CD into the CD player.

3 Insert a blank tape or MD into the recording deck and adjust the recording level, if necessary.

4 Start recording on the recording deck, then start playback on the playback component.

Notes

- You cannot record an analog audio signal from a component connected to the 5.1/DVD INPUT jacks.
- Sound adjustments do not affect the signal output from the audio output jacks.

Recording on a video tape

You can record from a VCR, a TV, or an LD player using the receiver. You can also add audio from a variety of audio sources when editing a video tape. See your VCR or LD player's instruction manual if you need help.

1 Select the program source to be recorded.

2 Prepare the component for playing.
For example, insert the laser disc you want to record into the LD player.

3 Insert a blank video tape into the VCR for recording.

4 Start recording on the recording VCR, then start playing the video tape or laser disc you want to record.

You can record the sound from any audio source onto a video tape while copying from a video tape or laser disc
After locating the point where you want to start recording from another audio source, select the program source, then start playback. The audio from that source will be recorded onto the audio track of the video tape instead of the audio from the original medium.

For example, if you want to record video from the component connected to the VIDEO 1 jacks and audio from the component connected to the CD jacks:

1 Rotate FUNCTION to select VIDEO 1.

2 Press MODE repeatedly to display "A-XXX."

3 Rotate FUNCTION to display "A- CD."

See "MODE button" on page 17 for details on use of the MODE button.

To resume audio recording from the original medium, do the procedure above to select the video source again.

Notes
- You cannot record the audio from a program source connected to the 5.1/DVD INPUT jacks.
- Sound adjustments do not affect the signal output from the audio output jacks.

Adjustments Using the SET UP Button

The SET UP button allows you to make following adjustments.

Adjusting the brightness of the display

1 Press SET UP repeatedly until "DSPL SET UP" appears in the display.

2 Press the cursor buttons (∧/∨) to select "DIMMER."

3 Press the cursor buttons (</>) to select the brightness level.
You can select any of four brightness levels.

Increasing the output level of the rear speakers by 5 dB

1 Press SET UP repeatedly until "REAR GAIN" appears in the display.

2 Press the cursor buttons (</>) to select "GAIN UP."

To restore the normal output level
Repeat the procedure above, selecting "GAIN NORM" in Step 2.

Additional Information

Troubleshooting

If you experience any of the following difficulties while using the receiver, use this troubleshooting guide to help you remedy the problem. See also "Checking the connections" on page 14 to verify that the connections are correctly made. Should any problem persist, consult your nearest Sony dealer.

There's no sound or only a very low-level sound is heard.

- ➡ Check that the speakers and components are connected securely.
- ➡ Make sure that you've selected the correct component on the receiver.
- ➡ Make sure that you've set the SPEAKERS selector correctly (see page 17).
- ➡ Press the MUTING button to turn off the MUTING indicator.
- ➡ The protective device on the receiver has been activated because of a short circuit. Turn off the receiver, eliminate the short-circuit problem and turn on the power again.

No sound is heard from the center speaker.

- ➡ Select a sound field in the CINEMA genre (see page 22).
- ➡ If the PHANTOM center mode is selected, there is no center speaker output. Select the appropriate center mode (see page 12).
- ➡ Adjust the speaker volume appropriately (see pages 12 and 13).
- ➡ **After taking all the measures above, adjust the speaker volume with a test tone (see pages 12 and 13) and verify that test tone is output from the center speaker.**

No sound or only a very low-level sound is heard from the rear speakers.

- ➡ If the 3CH LOGIC center mode is selected, there is no rear speaker output. Select the appropriate center mode (see page 12).
- ➡ Adjust the speaker volume appropriately (see pages 12 and 13).
- ➡ In normal two-channel stereo output, there is no rear speaker output. Make sure the sound field function is on.
- ➡ **After taking all the measures above, adjust the speaker volume with a test tone (see pages 12 and 13) and verify that test tone is output from the rear speakers.**

The left and right sounds are unbalanced or reversed.

- ➡ Check that the speakers and components are connected correctly and securely.
- ➡ Adjust the BALANCE control.

Severe hum or noise is heard.

- ➡ Check that the speakers and components are connected securely.
- ➡ Check that the connecting cords are away from a transformer or motor, and at least 3 meters away from a TV set or fluorescent light.
- ➡ Move your TV away from the audio components.
- ➡ Make sure you've grounded ⏚ SIGNAL GND terminal.
- ➡ The plugs and jacks are dirty. Wipe them with a cloth slightly moistened with alcohol.

Recording cannot be done.

- ➡ Check that the components are connected correctly.
- ➡ Select the source component with the FUNCTION control.
- ➡ You cannot record audio from a program source connected to the 5.1/DVD INPUT jacks.

Radio stations cannot be tuned in.

- ➡ Check that the antennas are connected securely. Adjust the antennas and connect an external antenna if necessary.
- ➡ The signal strength of the stations is too weak (when tuning in with automatic tuning). Use direct tuning.
- ➡ No stations have been preset or the preset stations have been cleared (when tuning by scanning preset stations). Preset the stations (see page 27).
- ➡ Press the DISPLAY button so that the frequency appears in the display.

RDS does not work.

- ➡ Make sure that you're tuned to an RDS FM station.
- ➡ Select a stronger FM station.

The station was interrupted by another station or the receiver automatically starts scanning stations even when a program source other than tuner is selected.

- ➡ The EON function is activated. Turn off the EON function if you don't want the current program source to be interrupted.

The RDS information that you want does not appear.

- ➡ Contact the radio station and find out whether or not they actually provide the service in question. If so, the service may be temporarily out of order.

The sound field effect cannot be obtained.

- ➡ Turn on the sound field function.
- ➡ Make sure that the SPEAKERS selector is set to A or B when you use two sets of front speakers.
- ➡ Sound field function is turned off whenever the program source connected to the 5.1/DVD INPUT jacks is selected.

No picture or an unclear picture appears on the TV screen or monitor.

- ➡ Select the appropriate function on the receiver.
- ➡ Set your TV to the appropriate input mode.
- ➡ Move your TV away from the audio components.

A picture from a video component that you have not selected appears on the TV screen or monitor.

- ➡ Press the MODE button repeatedly to display "V-XXXXX" and identify the video component.

The remote does not function.

- ➡ Point the remote at the remote sensor ▣ on the receiver.
- ➡ Remove any obstacles in the path between the remote and the receiver.
- ➡ Replace all the batteries in the remote with new ones, if they are weak.
- ➡ Make sure you select the correct function on the remote.
- ➡ If the remote is set to operate the TV only, rotate the FUNCTION control on the receiver before operating the receiver or another component.

Reference pages for clearing the receiver's memory

To clear	See page
All the contents of memory	13
Customized sound fields	23

Specifications

Amplifier section

POWER OUTPUT

Stereo mode (DIN 1 kHz, 4 ohms)
STR-DB825: 100 W + 100 W
STR-DB725: 80 W + 80 W

Surround mode
(DIN 1 kHz, 4 ohms)
STR-DB825:
Front: 100 W + 100 W
Center[a]: 100 W
Rear[a]: 100 W + 100 W
STR-DB725:
Front: 80 W + 80 W
Center[a]: 80 W
Rear[a]: 80 W + 80 W

a) Depending on the sound field settings and the source, there may be no sound output.

5.1/DVD mode (DIN 1 kHz, 4 ohms)
STR-DB825:
Front: 100 W + 100 W
Center[a]: 100 W
Rear[a]: 100 W + 100 W
STR-DB725:
Front: 80 W + 80 W
Center[a]: 80 W
Rear[a]: 80 W + 80 W

Frequency response
PHONO: RIAA equalization curve ±0.5 dB
CD, TAPE/MD, VIDEO 1/2/3: 10 Hz - 50 kHz +0.5/–2 dB (with sound field, tone, and bass booster bypassed)

Inputs
PHONO:
Sensitivity: 1.5 mV
Impedance: 50 kilohms
S/N[b]: 75 dB (A, 2.5 mV[c])
CD:
Sensitivity: 150 mV
Impedance: 50 kilohms
S/N[b]: 82 dB (A, 150 mV[c])
TAPE/MD, VIDEO 1/2/3, TV/LD:
Sensitivity: 150 mV
Impedance: 50 kilohms
S/N[b]: 82 dB (A, 150 mV[c])
5.1/DVD INPUT
Sensitivity: 150 mV
Impedance: 50 kilohms
S/N[b]: 82 dB (A, 150 mV[c])

b) 78' IHF
c) Weighted network, input level

Outputs
AUDIO OUT:
Voltage: 150 mV
Impedance: 10 kilohms
WOOFER:
Voltage: 2 V
Impedance: 1 kilohm
PHONES:
Accepts low- and high-impedance headphones

BASS BOOST +10 dB at 70 Hz

TONE ±8 dB at 100 Hz and 10 kHz

FM tuner section

Tuning range 87.5 - 108.0 MHz

Antenna terminals
75 ohms, unbalanced

Sensitivity Mono: 18.3 dBf, 4.5 μV
Stereo: 38.3 dBf, 45 μV

Usable sensitivity
11.2 dBf, 1 μV (IHF)

S/N Mono: 76 dB
Stereo: 70 dB

Harmonic distortion at 1 kHz
Mono: 0.3%
Stereo: 0.5%

Separation 45 dB at 1 kHz

Frequency response
30 Hz - 15 kHz +0.5/–2 dB

Selectivity 60 dB at 400 kHz

AM tuner section

Tuning range 531-1,602 kHz (with 9-kHz tuning scale)

Antenna Loop antenna

Usable sensitivity
50 dB/m (at 999 kHz)

S/N 54 dB (at 50 mV/m)

Harmonic distortion
0.5 % (50 mV/m, 400 Hz)

Selectivity 35 dB

Video section

Inputs 1 Vp-p 75 ohms

Outputs 1 Vp-p 75 ohms

General

System Tuner section:
PLL quartz-locked digital synthesizer system
Preamplifier section:
Low-noise NF type equalizer
Power amplifier section:
Pure-complementary SEPP

Power requirements
230 V AC, 50/60 Hz

Power consumption
STR-DB825: 220 W
STR-DB725: 200 W

AC outlet 100 W maximum, switched

Dimensions 430 × 160 × 410 mm including projecting parts and controls

Mass (approx.)
STR-DB825: 12.5 kg
STR-DB725: 10.9 kg

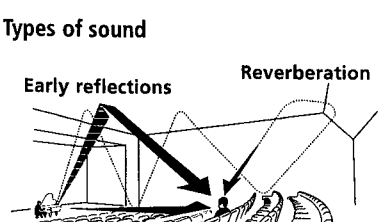
Supplied accessories
See page 4.

Design and specifications are subject to change without notice.

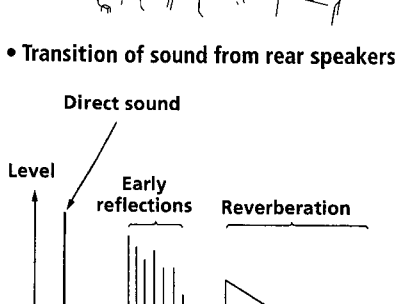
Glossary

Surround sound
Sound that consists of three elements: direct sound, early reflected sound (early reflections) and reverberative sound (reverberation). The acoustics of the surrounding space affect the way these three sound elements are heard. Surround sound combines these sound elements in such a way that you actually can sense the size of the venue, as well as its type.

• Types of sound



• Transition of sound from rear speakers



Dolby Pro Logic Surround
As one method of decoding Dolby Surround, Dolby Pro Logic Surround produces four channels from two-channel sound. Compared with the former Dolby Surround system, Dolby Pro Logic Surround reproduces left-to-right panning more naturally and localizes sounds more precisely. To take full advantage of Dolby Pro Logic Surround, you should have one pair of rear speakers and a center speaker. The rear speakers output monaural sound.

Dolby Digital (AC-3)
This sound format for movie theaters is more advanced than Dolby Pro Logic Surround. In this format, the rear speakers output stereo sound with an expanded frequency range and a subwoofer channel for deep bass is independently provided. This format is also called "5.1" because the subwoofer channel is counted as 0.1 channel (since it functions only when a deep bass effect is needed). All six channels in this format are recorded separately to realize superior channel separation. Furthermore, since all the signals are processed digitally, less signal degradation occurs. The name "AC-3" comes from the fact that it is the third audio coding method to be developed by the Dolby Laboratories Licensing Corporation.

Digital Cinema Sound
This is the generic name of the surround sound produced by digital signal processing technology developed by Sony. Unlike previous surround sound fields mainly directed at the reproduction of music, Digital Cinema Sound is designed specifically for the enjoyment of movies.

5.1/DVD INPUT jacks
These jacks are used to input decoded Dolby Digital (AC-3) audio signals, allowing you to enjoy 5.1 channel surround sound. Use these jacks to connect a Dolby Digital (AC-3) decoder or a DVD player with a built-in AC-3 decoder.

Tables of Settings Made Using the CURSOR MODE and SET UP Buttons

A variety of settings can be made using the CURSOR MODE and SET UP buttons, in conjunction with the cursor buttons. These settings are shown in the following tables.

Press CURSOR MODE repeatedly to light up	Press ∧ or ∨ to select	Then < or > to select	See page
SURROUND indicator	DELAY	15, 20, or 30 ms	23
	EFFECT	among six levels of amount of effect	
	REAR	between –15 dB to +10 dB (in 1 dB steps)	
	CENTER		
BASS/TREBLE indicator	BASS	between –10 dB to +10 dB (in 2 dB steps)	
	TREBLE		
INDEX indicator	a character	cursor position	32

Press SET UP repeatedly to display	Press ∧ or ∨ to select	Then < or > to select	See page
CTR MODE	—	PHANTOM, 3CH LOGIC, NORMAL, or WIDE	12
DSPL SET UP	DIMMER	among four levels of brightness	33
REAR GAIN	—	GAIN UP or GAIN NORM	

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